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(54) Title: SINGLE NUCLEOTIDE POLYMORPHISMS SENSITIVELY PREDICTING ADVERSE DRUG REACTIONS (ADR) AND DRUG EFFICACY

(57) Abstract: Single Nucleotide Polymorphisms sensitively predicting Adverse Drug Reactions (ADR) and Drug Efficacy. The invention provides diagnostic methods and kits including oligo and/or polynucleotides or derivatives, including as well antibodies determining whether a human subject is at risk of getting adverse drug reaction after statin therapy or whether the human subject is a high or low responder or a good or bad metabolizer of statins. The invention provides further diagnostic methods and kits including antibodies determining whether a human subject is at risk for a cardiovascular disease. Still further the invention provides polymorphic sequences and other genes. The present invention further relates to isolated polynucleotides encoding a phenotype associated (PA) gene polypeptide useful in methods to identify therapeutic agents and useful for preparation of a medicament to treat cardiovascular disease or influence drug response, the polynucleotide is selected from the group comprising: SEQ ID 1-168 with allelic variation as indicated in the sequences section contained in a functional surrounding like full length cDNA for PA gene polypeptide and with or without the PA gene promoter sequence.

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